DOCUMENT RESUME

ED 471 687 PS 030 848

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TITLE	What Adolescents Need: A Self-Determination Theory Perspective on Development within Families, School, and Society.
PUB DATE	2002-00-00
NOTE	28p.; In: Academic Motivation of Adolescents. Adolescence and Education Series; see PS 030 841.
AVAILABLE FROM	Information Age Publishing, Inc., 80 Mason Street, Greenwich, CT 06830. Tel: 203-661-7602; Fax: 203-661-7952; Web site: http://www.infoagepub.com.
PUB TYPE	Information Analyses (070)
EDRS PRICE	EDRS Price MF01 Plus Postage. PC Not Available from EDRS
DESCRIPTORS	*Adolescent Development; *Adolescents; Adult Child Relationship; Attachment Behavior; Childhood Needs; Developmental Stages; Developmental Tasks; Emotional Adjustment; Family Influence; Family School Relationship; Individual Differences; Learning Motivation; *Parent Influence; Personal Autonomy; *Psychological Needs; Self Determination; Self Motivation; Social Adjustment; Student Motivation; Theories; *Well Being
IDENTIFIERS	Identity Formation; *Individuation

ABSTRACT

Although the structure of modern society has both prolonged adolescence and exacerbated some of its tasks and challenges, the majority of adolescents successfully negotiate this period and mature in a relatively healthy manner. Nevertheless, significant numbers of adolescents find the challenges overwhelming, experience great conflict, and wind up alienated or compromised in their entry into the adult world. This chapter reviews research on how families, schools, and cultures influence adolescent motivation and well-being, focusing on the issue of why some teenagers are able to successfully negotiate the tasks of adolescence and others have difficulty in this negotiation. Using the framework of self-determination theory, the chapter examines the social-contextual factors in home and school environments that foster versus undermine internalization of social goals and values, intrinsic motivation, and more secure attachments and identifications with adults. Important concepts of self determination theory are described, focusing on the three basic psychological needs of relatedness, competence, and autonomy. The chapter disputes claims that adolescents need to separate from adults to individuate, and reviews research showing that, contrary to several contemporary perspectives, parental support for adolescents' basic psychological needs provides a secure foundation from which adolescents can meet the challenges of their passage into adulthood. The paper notes that need fulfillment in school plays a crucial role in promoting intrinsic motivation and the internalization of values, and that basic psychological needs inform the acquisition of identities in the social context. (Contains 95 references.) (KB)

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ED 471 687

PS 030848

CHAPTER 7

WHAT ADOLESCENTS NEED

A Self-Determination Theory Perspective on Development within Families, School, and Society

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Adolescence is characterized first and foremost by change. Arguably at no other time in development are so many factors in flux. Changes in physical, emotional, and intellectual capacities are manifold. Among the critical developmental and psychological challenges that adolescents face are relational tasks, such as transforming childlike ties in familial relationships into ones of adult mutuality, and forming enduring and satisfying extrafamilial relationships with partners and friends. Also, competency-relevant tasks, such as meeting the demands of school and work, and successfully choosing and developing vocational and avocational interests become more pressing (Csikszentmihalyi & Larson, 1984). Finally, internalizing specific norms and practices—shifting from mere compliance to self-regulated, willing adherence and endorsement of a coherent set of social values—is a central task toward identity formation and passage into adulthood.

The changes associated with puberty, physical maturation, and the transition from childhood to adult roles are clearly universal and inherent

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aspects of adolescence. However, the structure of modern society has both prolonged this developmental stage and exacerbated some of its tasks and challenges. Specifically, how adolescents engage developmental tasks and formulate an identity remains more "open" for most adolescents today, in contrast to most previous societies, in which their social roles, economic positions, marriages, and social support networks were automatically conferred or predetermined to a much greater extent (Ryan & Deci, in press). Adolescents today must "find their place"—exploring which values, lifestyles, friends, group identifications, and vocations to adopt. This process of self-definition takes place over an extended time period, and in many cases makes the tasks of adolescence last far past the teenage years.

Given such challenges, it is noteworthy that most adolescents successfully negotiate this period and mature in a relatively healthy manner (Collins & Laursen, 1992). Most remain closely connected with parents and siblings, carve out a reasonably satisfying identity, successfully develop new relationships, and internalize and integrate some abiding values. However, this majority stands alongside the still significant number of adolescents who find the challenges overwhelming, who experience great conflict, and who wind up alienated or compromised in their entry into the adult world.

This chapter focuses precisely on the issue of why some teens are able to successfully negotiate the "tasks" of adolescence, while others find themselves blocked or frustrated in their development. In particular, our interest is to define the *psychological needs* of adolescence, or the necessary nutriments that make optimal development possible. In line with this aim, we are also interested in identifying the types of social environments that meet the psychological needs of teens and thus facilitate their healthy development, versus those social contexts that do not meet needs and accordingly inhibit or derail optimal functioning and growth.

Specifically using the framework of self-determination theory (SDT) (Ryan & Deci, 2000), we examine the social-contextual factors in home and school environments that foster versus undermine adolescent well-being, self-motivation, and the internalization of important social values and practices. We also discuss the issue of identity formation in terms of not only finding a place, but finding the "right place." More specifically, we look at the degree to which identities are truly integrated into the self, and the implications of the relative integration of identity for adolescents' mental health and ongoing development.

SELF-DETERMINATION THEORY IN BRIEF

SDT is in many ways both a classical view of development, and a new way to analyze psychological and social issues. As a classical view, SDT is an organ-

ismic theory. In line with theorists such as Goldstein (1939), Rogers (1963), and White (1963), SDT assumes that people are active agents in the tasks of development. SDT holds that humans are liberally endowed with *intrinsic motivation*, a natural and spontaneous tendency to be curious and interested in exploring novelty and tackling new challenges. SDT also assumes that humans have an assimilative tendency to *internalize and integrate* social norms and practices. The specific forms of internalization are viewed as dependent on the kind of supports provided by the socializing environment. As such, SDT differentiates between relatively primitive or incomplete forms of internalization, mostly based on reward and punishment socialization contingencies, and some relatively sophisticated and well-synthesized forms of internalization that are related to more informational and relationally based forms of socialization (Ryan, 1993). With these assumptions in mind, SDT suggests that it is the degree to which individuals can both experience intrinsic motivation and integrate regulations of social behaviors into the self that predicts well-being and full functioning at every age and in every domain (Ryan & Deci, 2000).

Perhaps the most radical assumption of SDT is that in order to function optimally, the processes of intrinsic motivation, internalization, and integration require *basic psychological needs* to be supported (Deci & Ryan, 2000; Ryan, 1995). Just as the organic development of a plant depends on the nutriments of soil, sunlight, and water, healthy psychological development of the person requires, according to SDT, some basic nutriments in the form of social supports for psychological growth. Accordingly, SDT suggests that the most basic psychological nutriments are the needs for relatedness, competence, and autonomy.

Relatedness concerns feelings of connection and belongingness with others. The experience of belonging or being intimately connected with others provides the requisite emotional security to actively venture out into the world and explore (Baumeister & Leary, 1995; Deci & Ryan, 2000). Furthermore, relatedness needs provide a central motive for internalizing social regulations and adapting to interpersonal and cultural circumstances. *Competence* represents the need to feel effective in one's actions and capable of meeting the challenges of everyday life (White, 1963). Supports for competence include structure and guidance, as well as the provision of optimally challenging (rather than overwhelming) tasks and responsibilities. Finally, *autonomy* concerns the developmental need to self-regulate activity rather than to be heteronomously controlled (Deci & Ryan, 1987, 2000). Autonomy describes the full endorsement by, and participation of, the self in one's behavior, and is dependent on awareness of inner motives, emotions, and external demands. This stands in contrast to controlled or fragmented functioning, which is associated with behavior that is regulated by forces that are perceived to be alien or external to the

self. Controlled functioning impedes the development of awareness of inner motives and emotions, and consequently the development of healthy self-regulation.

The dynamic interplay of these three basic needs and the opportunities afforded in the social environment for their satisfaction define the trajectories of motivation, growth, and integrity. Although the expression of autonomy, competence, and relatedness needs may vary at different points in development and may vary from culture to culture, a rich body of evidence has shown that satisfaction of these needs within varied contexts, domains, and relationships is salient to adolescents' "coming of age" in all cultures (Chirkov, Ryan, Kim, & Kaplan, 2001) and is related to optimal growth and development across the lifespan (Deci & Ryan, 2000; Ryan & Deci, 2001; Ryan & La Guardia, 2000). As we shall see as we explore home, school, and the greater social context, how needs are satisfied is perhaps the most critical factor in shaping adolescents' negotiation of developmental tasks and determining their resultant well-being.

AUTONOMY AND RELATEDNESS: THE ADOLESCENT IN THE FAMILY

The foundation of healthy adolescent development rests upon relationships with parents or caregivers. By providing supports for the psychological development of their growing child, parents foster the confidence and active motivation needed to meet developmental tasks, as well as the relational security and sense of self needed to promote resilience in the face of challenges. In childhood, parents support development by creating structured environments that provide a coherent, rational, and guided navigation of developmental tasks. Parents must devote significant time, energy, and attention to assisting the child as he or she takes on challenges, explores new skills, and stretches him- or herself in terms of self-expression. In adolescence, however, although the provision of structure and involvement of parents continues to be important, adolescents begin to develop the cognitive and emotional capacities to increasingly self-regulate their own behaviors. They also spend less time in the presence of their parents, developing much of their interests and forming their identities in the context of new relationships with peers and other adults (e.g., teachers). As such, the parent–adolescent relationship evolves significantly during this time and requires a deeper level of trust, more open communication, and support that is commensurate with the adolescents' developmental capacities. Parents remain involved through maintaining reasonable limits and providing optimal challenges for their adolescents—allowing them to exercise their agency and self-initiative, explore new challenges, and

extend their relations to peers and other adults. Thus, parents who support their adolescents' needs by being involved and setting appropriate limits, while showing empathy, trust, and interest, lay the strongest foundation for adolescents' optimal development (Grolnick, Deci, & Ryan, 1997), while parents who fail to meet their adolescents' needs foster rebellion, reactance, or apathy.

Given the importance of parents, it is interesting that many Western psychological theorists have portrayed adolescence as a time that necessitates detaching from parents. For example, a quite popular view is that adolescents engage in a process of *individuation* that is characterized by "breaking" or weakening of familial bonds in the service of forging new, extrafamilial relationships, and an identity of "one's own" (Blos, 1979; Freud, 1958/1969; Steinberg & Silverberg, 1986). In such views, individuation requires separateness from parents, or a distancing from their love and influence, in order to forge one's own set of adult values, goals, and social relationships.

The SDT view of adolescent development is quite different from this traditional formulation. According to SDT, the process of individuation indeed concerns internalization of values, identity development, and extrafamilial relatedness. However, none of these developmental tasks is seen as necessitating separateness, independence, or "breaking away" from parents. In fact, such detachment is viewed as neither "natural" nor particularly healthy. Instead, separateness, rebellion, or breaking away are seen as *reactions* to familial and cultural conditions that frustrate psychological needs. Specifically, SDT predicts that teens detach mainly when parents are excessively controlling (thereby frustrating autonomy needs), cold or rejecting (thereby frustrating relatedness needs), or are unrealistically demanding (thereby frustrating competence needs). Thus, insofar as parents fail to support needs, adolescents will more likely need to break away or detach from them, a nonoptimal but all too common outcome.

Research has borne out this SDT contention. For example, based on the theories of Blos (1979), Steinberg and Silverberg (1986) argued that adolescents individuate by becoming "emotionally autonomous" from parents. Their construct of emotional autonomy (EA) reflects detaching or distancing oneself from parents, being less trusting of their guidance, and being more reluctant to follow their lead. Ryan and Lynch (1989) suggested that such EA from parents represents neither autonomy (defined as self-regulation or volition) nor healthy individuation. Instead, they argued that parents who are supportive of their adolescent's needs are more likely to have a teen who willingly relies on them, who is more likely to listen to their inputs, and who feels closer to them. Accordingly, Ryan and Lynch showed empirically that EA was (a) negatively related to parental support of their

teenager's autonomy as well as the teenager's felt connectedness to the family, and (b) negatively related to adolescent well-being.

Subsequent research has shown that, among adolescents, those with higher EA have parents that are characterized as non-nurturing, too cold, or controlling (Lamborn & Steinberg, 1993; Turner, Irwin, & Millstein, 1991); are more commonly children of divorce; and are more commonly in high-risk families who have low cohesion (Ryan & Lynch, 1989) than those with lower EA. EA has also been negatively associated with authoritative and positively associated with authoritarian practices of parenting (McBride-Chang & Chang, 1998; Ryan & Lynch, 1989). In terms of adolescents' functioning, those higher in EA have shown lower self-esteem and greater susceptibility to negative peer pressure (Chen, 1999), lower school achievement (McBride-Chang & Chang, 1998), and lower overall well-being and higher risk behaviors such as drug use, alcohol use, smoking, and unprotected sex (Ryan & Lynch, 1989; Turner et al., 1991) than those lower in EA. In sum, these findings, which have been obtained in both Asian and North American samples, suggest that EA is negatively related to the development of true autonomy and well-being. Indeed, the only circumstance in which EA appears to be a favorable characteristic is when adolescents have extremely non-nurturing parents (Fuhrman & Holmbeck, 1995). Thus, only when parents fail to support psychological needs might such detachment or "emotional autonomy" convey advantages.

In contrast, adolescents' individuation, internalization of adult roles, and growth in self-regulation have been shown to proceed more optimally when parents and other adults (e.g., teachers) provide support for basic needs. When adults support needs, adolescents are more likely to rely on them, accept their guidance, and also experience more positive well-being in the context of their developmental transitions (Ryan, La Guardia, Butzel, Kim, & Chirkov, 2002). Additionally, when parents support psychological needs, their adolescent offspring remain more attached to them, show better school functioning, and are able to form more healthy extrafamilial relationships. In essence, adolescents utilize parental relationships as the supportive backdrop from which they can venture out to explore the world and define themselves.

For example, La Guardia, Ryan, Couchman, and Deci (2000) investigated the relations between security of attachment with close relationship partners, including parents, and perceived need supportiveness of these partners in a sample of late adolescents. As predicted, the relative security felt with social partners was strongly associated with the extent to which each supported autonomy, competence, and relatedness needs. Thus, consistent with the SDT formulation, when parents supported psychological needs, adolescents and young adults did not detach from them but instead were more securely attached. Leak and Cooney (2001) replicated this gen-

eral model, showing both the positive relations between autonomy support and attachment.

In terms of school functioning, Avery and Ryan (1987) investigated preadolescents' mental health and classroom adjustment as a function of children's interview-based descriptions of their parents. Parents who were described as more nurturant were those who were shown to be more warmly involved with their children. Greater nurturance, in turn, predicted better social and academic functioning of the children within the classroom. Similarly, Ryan, Stiller, and Lynch (1994) found that among adolescents, greater relatedness to parents, as assessed by indicators of felt security, utilization, and emulation of parents, predicted stronger engagement in school, as well as higher self-esteem and well-being.

Parental autonomy support has also been shown to foster greater identification with and intrinsic motivation for school activities. As compared to children of more controlling parents, autonomy-supportive and warmly involved parents have children who report more self-motivation for school, who are rated by teachers as less behaviorally or academically troubled, and who actually achieve higher grades and standardized test outcomes (Grolnick & Ryan, 1989; Grolnick, Ryan, & Deci, 1991). Students also exhibit more inner resources for school—showing greater volition, confidence, and sense of control—when they experience parents as more autonomy supportive and involved (Grolnick, Ryan, & Deci, 1991). Such findings have also been supported cross-culturally. For example, Chirkov and Ryan (2001) examined perceptions of parental autonomy support in both Russian and U.S. high school students, and found that both overall mental health and identification with the importance of school were associated with greater autonomy support by parents in both nations, to equal degrees.

Finally, the importance of familial relations to the formation of nurturant relationships outside of the family has been demonstrated. For example, Ryan and colleagues (1994) found that the quality of relatedness to parents predicted quality of relatedness to teachers and peers, with greater support from parents associated with more supportive relations with teachers and peers. Also, Dresner and Grolnick (1996), examining the development of intimate relationships in young women, found that those women who successfully attained healthy intimate relationships with partners were those who experienced their parents as autonomy supportive and emotionally accepting. Thus, a supportive family environment can conduce toward greater support and relatedness in extrafamilial relationships as well.

In sum, the SDT viewpoint suggests that parental supports for basic psychological needs provide the foundation for teens to tackle the challenges of individuation, achievement-related tasks, and formation of new relation-

ships. When homes are nurturant, teens not only experience greater well-being, but they also appear to be more likely to internalize constructive societal and school-related goals, and form more healthy extrafamilial relationships. Importantly, in such homes, there is less need to detach, suggesting that the development of autonomy and the maintenance of connectedness to family are not at all antithetical.

PSYCHOLOGICAL NEEDS IN THE CONTEXT OF SCHOOL

Outside of the family, school is the central domain for most teens to engage in tasks of development. In modern societies, schools serve as a place to forge adult self-concepts, and they function as a gateway into other identities and professions. Certainly, how well adolescents adjust to school and engage the tasks of development varies. According to SDT, much of that variance is determined by the extent to which psychological needs for autonomy, competence, and relatedness are able to be fulfilled or are largely frustrated within school. Thus, in part on the basis of school experiences, teens can learn to see themselves as able or incompetent, as belonging or outcast, as personally empowered or weak and without voice. SDT suggests that if teens can feel autonomy, competence, and belongingness in school, they will experience more intrinsic motivation to learn, they will more deeply value and engage school-relevant tasks, and they will experience greater well-being. We now review the influences of needs on the processes of intrinsic and extrinsic motivations to learn, and the impact on well-being.

Intrinsic and Extrinsic Motivation

Many theories of motivation suggest that motivation is a unitary phenomenon—one has more or less motivation. However, SDT suggests that the primary issue in motivation is not how much motivation a person has, but what kind. Accordingly, SDT distinguishes types or orientations of motivation. The first distinction is between intrinsic motivation (motivation based on the inherent satisfactions of activity) and extrinsic motivation (motivation based on instrumentalities). Further, extrinsic motivation is differentiated by one's level of relative autonomy. SDT does not embrace a simple intrinsic/extrinsic dichotomy, but rather suggests a differentiated family of motives that have both different antecedents and consequences and are associated with different subjective experiences.

Intrinsic motivation refers to the innate tendency to explore, take interest in novelty and challenges, and stretch one's capacities. When intrinsically motivated, people engage in activities for their inherent satisfactions, and they experience their activity as self-originated and organized, as well as effective (Deci, 1975). Thus, intrinsic motivation is characterized by experiences of autonomy and competence.

Intrinsic motivation plays a primary role in development (Elkind, 1971; Harter, 1978; Krapp, Renninger, & Hoffmann, 1998). Through spontaneous interest, playful engagement, and exploration of one's environment, one's capacities are stretched, new skills are acquired and mastered, and knowledge is expanded. As such, intrinsic motivation is an important process underlying cognitive, affective, and motor development, as well as the exploration of interests toward identity formation.

Research has clearly demonstrated the importance of intrinsic motivation to engagement with and success in school. Researchers have linked intrinsic motivation for schoolwork with more interest, curiosity, independence, and desire for challenge in the classroom (Boggiano & Katz, 1991; Harter, 1978), as well as with better cognitive performance at complex tasks (Benware & Deci, 1984; Grolnick & Ryan, 1987). For example, Ryan, Connell, and Plant (1990) asked students to read a passage and rate their interest and enjoyment of the material. Students' interest and enjoyment of the material was associated with both their self-reported comprehension and their actual recall of the material. Other studies have also shown that focusing on the interest in materials (fostering intrinsic motivation) is associated with higher learning. In a sample of college students, Benware and Deci (1984) showed that those who learned material with the intent of teaching it to others reported higher intrinsic motivation for learning the material than those who learned material in order to be tested on it. Greater intrinsic motivation was in turn associated with better conceptual learning of the material.

Despite numerous studies both in the Eastern and Western cultures that show that intrinsic motivation is clearly important during adolescence, intrinsic motivation for school often declines for many adolescents (e.g., Eccles, 1993; Gottfried, 1985). One possible reason for this decline is that changes in the school context during adolescence impacts satisfaction of autonomy and competence needs. Cognitive evaluation theory (CET) (Deci & Ryan, 1980), a component of SDT theory, explains how contextual conditions may support versus thwart intrinsic motivation, and thus why these declines in adolescent intrinsic motivation might result.

According to CET, when people perceive that their behavior is caused by forces external to the self (external perceived locus of causality), or when events/feedback decrease perceived competence, people experience diminished intrinsic motivation. By contrast, intrinsic motivation is

enhanced by events that facilitate an internal perceived locus of causality (autonomy) and promote perceived competence. Unlike social learning views (e.g., Bandura, 1983), which suggest that efficacy is the only necessary component for intrinsic motivation, SDT instead holds that unless a behavior is accompanied by a sense of autonomy, then perceived competence will not enhance intrinsic motivation. Thus, satisfaction of autonomy and competence needs are both necessarily implicated for intrinsic motivation to flourish.

Field studies have shown that teachers who are autonomy supportive catalyze greater intrinsic motivation, curiosity, and desire for challenge in students (Deci, Schwartz, Sheinman, & Ryan 1981; Flink, Boggiano, & Barrett, 1990; Ryan & Grolnick, 1986). For example, Ryan and Grolnick (1986), using both self-reports and projective stories to assess classroom climate, found that teachers high in autonomy support and warmth were those whose students reported greater intrinsic motivation and greater confidence regarding school. Similarly, Deci and colleagues (1981) found that when teachers advocated solutions that primarily considered the child's perspective (autonomy supportive), students showed greater mastery motivation, specifically more curiosity and more desire for challenge. In contrast, when teachers were more controlling (e.g., used contingencies, rewards and punishments, social comparisons, external praise, or pressure), students showed lower mastery motivation, lower confidence in their abilities, and lower self-worth. Furthermore, longitudinal data showed that teachers who were more controlling in their orientation before school even began had students who became less intrinsically motivated and who also decreased in their sense of competence and self-esteem over the early course of the school year.

Research has also shown that opportunities to express competence impacts intrinsic motivation. Activities that are either simple or overly challenging limit opportunities for competence, while activities that are optimally discrepant from people's skill levels tend to be more intrinsically motivating (Danner & Lonky, 1981). Also, contexts that provide structure, including a rationale for behavior and meaningful feedback to guide behavior, support the need for competence and allow greater opportunities for intrinsic interests to flourish (Koestner, Ryan, Bernieri, & Holt, 1984). Thus, importantly in the context of school, environments that pose optimal challenges for students and provide structure and guidance conduce to greater growth in terms of intrinsic motivation, and instead can be detrimental to growth if overstimulating or alternatively boring.

One prominent way that intrinsic motivation is thwarted is through the use of rewards as a means to motivate. When a person uses rewards to influence another's behavior (even when the rewards are desirable and positive), that person is conveying external control and is implicitly devaluing

the task at hand. In essence, the message that is conveyed is that "I am responsible for motivating you" and that "You wouldn't do this unless rewarded." Indeed, the implied messages are antithetical to being intrinsically motivated, and specifically to feeling interest and autonomy.

Although some behaviorists continue to suggest that rewards do not negatively affect intrinsic motivation (e.g., Eisenberger & Cameron, 1996), overwhelming evidence suggests otherwise. That is, when people are contingently rewarded for doing an interesting task, they express less interest in the task than those people who are not given rewards, and they are subsequently less likely to persist at the task when given freedom to do so (Deci, Koestner, & Ryan, 1999). This undermining effect of rewards on intrinsic motivation has been demonstrated across a variety of reward contingencies and methods of reward (e.g., Ryan & Deci, 2000; Ryan, Mims, & Koestner, 1983). Additionally, threats of punishment (Deci & Cascio, 1972), external evaluations (Smith, 1974), imposed deadlines (Amabile, DeJong, & Lepper, 1976), imposed goals (Mossholder, 1980), and symbolic awards (Lepper, Greene, & Nisbett, 1973), all of which can diminish the experience of autonomy, have also been shown to undermine intrinsic motivation. Alternatively, providing choice (Zuckerman, Porac, Lathin, Smith, & Deci, 1978) and acknowledging feelings (Koestner et al., 1984), which conduce to fostering autonomy, have been associated with enhanced intrinsic motivation. Thus, intrinsic motivation is diminished under conditions of contingent reward and other external controls, and is enhanced instead by environments that are autonomy supportive.

Another prominent way in which others thwart autonomy and competence needs, and consequently undermine intrinsic motivation, is by the style and language with which they engage students and intervene in their behavior. Research suggests that perceived competence is strengthened and intrinsic motivation consequently enhanced when positive competence feedback is administered in an autonomy-supportive context, while feedback in the form of pressure-laden evaluation diminishes feelings of competence and intrinsic motivation (Fisher, 1978; Ryan, 1982; Vallerand & Reid, 1984). Kast and Conner (1988) have also found that controlling praise undermines intrinsic motivation, whereas praise that is not controlling, and instead is effectance relevant, enhances it. Similarly, Ryan and colleagues (1983) found that the application of performance-contingent rewards, when accompanied by language reflecting a controlling style ("you should" or "you have to" perform) undermined intrinsic motivation, while similar rewards administered with a more autonomy-supportive style (e.g., "Do as well as you can") were less likely to undermine intrinsic motivation.

Clearly, as these findings suggest, support for autonomy and competence needs in the classroom indeed has a tremendous impact on students'

inner motivation and confidence about school. Classrooms that nurture autonomy tend to promote intrinsic motivation and perceived competence, whereas those that attempt to incite achievement through external regulations actually undermine intrinsic motivation in students and diminish their personal confidence toward learning.

As we have noted, the diminishment in intrinsic motivation is particularly evident in adolescence. Indeed, a prominent body of research has documented that the school context shifts considerably after elementary school in ways that significantly impinge on the fulfillment of autonomy and competence needs (Eccles, 1993).

First, in comparison to elementary schools, many middle schools and junior highs place greater emphasis on teacher control and discipline, and the use of rewards or other contingencies to control behavior (Eccles & Midgley, 1989). Midgley, Feldlaufer, and Eccles (1988) found that middle school teachers believed that their students needed more discipline and control, and were less trustworthy, than did teachers of sixth graders. Thomas (1980) also suggests that much of teacher verbiage at the end of primary grades is geared more toward behavior management than it is toward provision of information or instruction. Accompanying this emphasis on control are also fewer opportunities for students' inputs and choice. For example, Midgley and Feldlaufer (1987) found that despite students' desire for more input in decision making, students and teachers both reported that students have less opportunities for decision making when they enter middle school than they had previously. Indeed, these contextual shifts clearly impact adolescents' autonomy.

Another important shift occurring at the middle school and junior high levels is that there is an increased emphasis on grades as the primary means of feedback and greater public comparison of students, teachers, and schools as a means to "motivate" performance. For example, Midgley, Anderman, and Hicks (1995) found that middle school environments place a greater emphasis on performance goals (those aimed at achieving top grades and emphasizing social comparisons with other peers as measures of success) than on task goals (those that value self-improvement, effort, mastery, and understanding of materials), while elementary schools promote task-focused learning more than performance-focused learning. Importantly, research has shown that when students are task focused, they exert more effort, take on more challenging work, persist longer, and are more creative than when they are performance focused. When performance focused, students tend to engage in more surface-learning strategies, withdraw effort at the potential of failure, and lose interest in the tasks at hand (Kellaghan, Madaus, & Raczek, 1996).

A more recent development that also promotes a system-wide performance orientation is the use of "high stakes" standardized tests (Ryan & La Guardia, 1999). When standardized tests are used in a "high stakes" fashion, performance is translated into "reports cards" for students as well as teachers, schools, and districts. Teachers and schools are threatened with sanctions or promised rewards in accord with their performance, and students are "academically tracked" or "departmentalized" according to performances on these tests. The school climate created by "high stakes" testing emphasizes test-focused teaching (performance orientation) and crowds out alternative assessments of students' performance (e.g., portfolios, special demonstration projects) that allow optimal expression of their skills and talents (task orientation). Thus, the system often ignores students' unique talents and skills, and forces some into tracks that might not appropriately fit their development (e.g., pacing) or optimal style of learning. Importantly, these test-focused pressures to perform affect not only students who struggle with school but also high-achieving students by changing the focal point of learning, and consequently move all students even further away from intrinsically motivated behavior.

As this evidence would suggest, in line with SDT predictions, the declines evidenced in teens' intrinsic motivation suggest that the changing school climate may compromise needs via increased controls and pressures, as well as less choice and optimal challenges. Indeed, at an age when development of self-regulatory capacities is extremely salient and personal competencies are rapidly expanding, shifts in the organization and structure of schools may impinge on adolescents' needs and their natural tendencies to explore and learn, and thus result in lower intrinsic motivation and well-being.

Extrinsic Motivation and Internalization

Although the diminishment of intrinsic motivation during adolescence is an important issue, much, if not most, of what adolescents do in school is *extrinsically motivated*. That is, adolescents are engaging in activities that may not be inherently interesting, but are instead socially prescribed behaviors that may be instrumentally important. Indeed, one of the central tasks of adolescence is that of *internalization* of social values which underly and sustain such behaviors and the integration of these values into the self.

Behaviors that are extrinsically motivated may be valued or adopted to varying degrees. As previously noted, theories in the past have cast extrinsic behaviors as simply a single category of those activities that are instrumental to attaining outcomes. However, Ryan, Connell, and Deci (1985) suggested a more differentiated conceptualization of extrinsic motivation,

outlining a continuum of extrinsic motivation based on the relative autonomy of behavior and specifying the contextual factors that affect internalization and integration of behavior. Under this formulation, regulation is categorized as external, introjected, identified, or integrated. The least autonomous of extrinsic behaviors are termed *externally regulated*, and are performed to avoid punishments or reap rewards from others. These behaviors are typically experienced as having an external perceived locus of causality (deCharms, 1968), and thus are relatively nonautonomous. *Introjected* behaviors are those done in order to appease the ego (e.g., out of pride) or to avoid guilt or anxiety. These behaviors are simply done to maintain or enhance a sense of self-worth, and are thus regulated by self-esteem contingencies (Deci & Ryan, 1995). Behaviors regulated through introjection are also experienced as somewhat external to the self but are, in contrast to externally regulated behaviors, driven by internal rather than purely external contingencies and pressures.

More autonomous forms of extrinsically motivated behavior include *identification* and *integration*. Both of these forms of regulation are perceived to be emanating from the self and are experienced as self-valued and directed. Identification refers to those behaviors that one values and finds personally important but have yet to be wholly integrated with other behavioral repertoires of the person. For instance, adolescents may embrace their newfound sexuality and fully endorse engaging in sexual activity. They may also endorse a religious affiliation that does not necessarily coalesce with that sexual side. Thus, although both are identifications that are valued as part of the self, they are not reconciled with each other. When behaviors are fully integrated with other valued behaviors, they are then referred to as integrated, the most autonomous of extrinsically motivated behavior.

Although there is evidence that regulatory styles tend to become more internalized (i.e., more autonomous) over time (Chandler & Connell, 1987), often with the increases in cognitive capacity and ego development (Loevinger & Blasi, 1991), the internalization continuum as described here is not a stage-oriented process or developmental trajectory across time. Instead, people can internalize behaviors to relative degrees along this continuum and utilize different regulatory styles across time, and these may differ with each experience, context, or interpersonal milieu. Thus, although adolescence is touted as a period of movement toward greater self-regulation, behaviors may continue to be more or less internalized.

Considerable research has demonstrated differential outcomes as a function of how internalized, or relatively autonomous, an adolescent's motivation is (see Deci & Ryan, 2000, and Ryan & Deci, 2000, for reviews). Especially relevant are studies on school motivation. Numerous studies have shown that the more autonomous students' extrinsic motivation, that

is, the more internalized the regulation of behavior, the better their performance (e.g., Miserandino, 1996), the greater their engagement (e.g., Connell & Wellborn, 1991), and the greater the quality of their learning (e.g., Grolnick & Ryan, 1987). Additionally, the more autonomously regulated students are, the more enjoyment and positive coping strategies they have for school (Grolnick & Ryan, 1989), and the more likely they are to stay in school (Vallerand, Fortier, & Guay, 1997).

Researchers have also investigated how supports for autonomy and relatedness in the school environment affect the development of more internalized motivation, and consequently healthier functioning. For example, Chirkov and Ryan (2001) have demonstrated in both Russian and U.S. samples that teacher autonomy support (e.g., provision of choice, informational feedback) facilitates both intrinsic motivation and identification, whereas controlling teaching styles (e.g., use of rewards and contingencies to elicit performance) foster external regulation as a motivational orientation toward school. Chirkov and Ryan also showed that, in both nations, teacher autonomy support fosters greater adjustment and well-being, such as higher self-esteem and greater life satisfaction. Furthermore, Ryan and colleagues (1994), investigating students in Grades 7 through 9, found that students who had positive relationships with their teachers were more likely to approach them for help, and were more self-motivated in school than those who did not feel close to their teachers. Goodenow (1993) similarly suggested that greater acceptance and connection with teachers conduced toward more positive attitudes about school and higher achievement. Together, these studies suggest that greater autonomy and relatedness experienced with teachers promotes greater internalized, self-endorsed school values, and greater adjustment and school achievement.

In sum, schools are an important place in which adolescents' needs are influenced. Environmental supports for autonomy, competence, and relatedness help students flourish to their potentials—they promote intrinsic motivation and help students internalize values for learning. When healthier in school functioning, adolescents can develop self-regulation toward adult values, goals, pathways, and relationships. In contrast, insults to needs leave adolescents ill-equipped to deal with the challenges of school, and this may also affect how they negotiate further tasks of adulthood.

PSYCHOLOGICAL NEEDS IN SOCIETY: THE TASK OF IDENTITY FORMATION

Perhaps the penultimate task of adolescence is that of identity formation. Adolescents are thrust into a period of self-discovery in which their whole self is on the line—who they are and what they want to be comes into ques-

tion at almost every turn. Identities are formed around their roles within the family, academic interests and affiliations, the activities they pursue, the peer groups with whom they socialize, the vocation they choose, the lifestyles they emulate, and the culture in which they are embedded. From an SDT perspective, what identities are adopted and how they are chosen can be understood in terms of psychological needs.

SDT suggests that identities are formed in the service of psychological needs. Primarily, people assume roles, beliefs, and practices in order to connect to their social groups. Thus, the adoption of a particular identity serves to foster relatedness with important others. Identities are also assumed to be in the service of competence or autonomy needs as well. Identities in which people can stretch their skills and knowledge through optimal challenges will extend their feelings of effectance or competence, while identities in which people can exercise their true interests and capacities allows autonomy to be expressed. Optimally, of course, each of these needs will be fulfilled within a given identity. However, there are many ways in which needs are thwarted or pitted against each other that serve to make the choices of identity paths quite complex.

Adolescents are often controlled or pressured toward assuming certain identities (undermining autonomy) rather than being afforded support for exploration and choice. For example, some teens experience tremendous pressure from parents, teachers, or peers to adopt certain career paths (e.g., "You will be a doctor"), belief systems (e.g., "You must go to church"), or lifestyles (e.g., "If you don't join our gang, you are nobody"). Pressures such as these can lead to less internalized or endorsed identities precisely because opportunities to experiment, or to more reflectively select values and lifestyles, are foreclosed. Often, pressures to conform to the wishes or expectations of a parent, teacher, or peer also carry the threat of loss of love, connectedness, or esteem if noncompliant, thereby pitting autonomy and relatedness needs against each other. Threats to relatedness further undermine establishment of a secure base from which to explore and extend the self. By having to rely on themselves instead, adolescents have less energy and internal resources (e.g., emotional regulatory capacities) available for their processes of exploration and discovery. Finally, competence needs may be undermined by discouraging feedback from others or the presentation of nonoptimal challenges in the identity formation process. Adolescents will not be likely to deeply explore or assume identities in which they cannot feel competent, and thus they may abandon an identity path as a result. Certainly, school is a central arena in which feelings of effectance may be critically affected, and thus serves to shape the identities pursued and consequently adopted. Clearly, the ways in which adolescents are supported in this process becomes extremely important to how identity develops.

SDT contends that adolescents are naturally oriented toward "trying on" identities, sampling and temporarily emulating various lifestyles, career goals, and group affinities. Kaplan, Assor, and Kanat-Maymon (2001) have indeed shown evidence that adolescents are autonomously oriented toward, and authentically engaged in, the exploration and formulation of a conscious sense of identity in terms of goals, values, and commitments, despite at times feelings confused and uncomfortable in the process.

The identities that are "tried on" can be a product of intrinsic interests (e.g., a penchant for music leads to playing an instrument), early environmental influences (e.g., following the profession of one's father, adopting the same political affiliation as one's family), as well as possibilities encountered in extrafamilial contexts (e.g., acquiring value for activism from school experiences). Thus, some identities may be intrinsically motivated and may serve as the source for a person's avocation, career, or lifestyle (Krapp, in press). Still other identities may be formed because they have instrumental value or importance. That is, many identities are not energized by intrinsic interests but are instead roles, responsibilities, and tasks that are modeled or taught to be important and valuable. Although some of these identities too may emerge from the interests of the individual and may serve to form the rudiments of a particular identity, many of the identities that are "tried on" are those that others (e.g., parents, teachers, peers, society) originally proffer. Thus, many identities are internalized from the social environment.

Regardless of how identities are acquired, each identity formed has associated goals, values, and beliefs (Archer & Waterman, 1990), and these identities as well as the associated components may vary with respect to roles (Donahue, Robins, Roberts, & John, 1993; Sheldon, Ryan, Rawsthorne, & Illardi, 1997), domains (Linville, 1987), and relationships (La Guardia, 2001). Thus, people will generally have multiple identities and multiple identity components (goals, beliefs, values, emotions, behaviors) that may be more or less conferred versus actively selected, and may differ in content to varying degrees.

Importantly, SDT suggests that the extent to which each component of identity is authentically held, or in line with one's "true self," is strongly tied to how others support or discourage the experiences and expressions of these identity components. For example, although a religious viewpoint may be espoused within one's family, and thus in some ways conferred early on to a child, the child may grow to fully embrace these values and hold an identity that converges with these beliefs. Alternatively, she could feel pressured to adopt the religious identity espoused by her family in order to remain in favor with her parents or the greater religious community, despite experiencing these values as alien or antithetical to the self. According to SDT, the degree to which identities are internalized,

endorsed, and valued is a function of whether opportunities for need fulfillment are afforded. Accordingly, identities that are identified or integrated are those that are more autonomously regulated and endorsed and have been acquired in need-supportive contexts, while externally regulated or introjected identities are those identities that have been foreclosed or inadequately explored and emerge in contexts that are less need supportive.

Some recent research has borne out this proposition. For example, Sheldon and colleagues (Sheldon & Elliot, 1998; Sheldon & Kasser, 1998) have shown that self-concordant identities—those that fulfill basic needs for autonomy, competence, and relatedness—are experienced as authentic and are fully internalized within the self, while nonconcordant identities are introjected or externally regulated, and serve as compensatory ways of getting needs met. Also, Gagné, Ryan, and Barghman (2001), surveying a sample of aspiring young female gymnasts over the course of a season, found that gymnasts who perceived their coaches and parents to be more autonomy supportive reported more identified and intrinsic motivation for gymnastics and greater well-being, while those who perceived their coaches and parents to be more controlling reported more external regulation for gymnastics and lower well-being. Gymnasts who were identified and intrinsically motivated perceived parents and coaches to be more involved in terms of dedicated time, resources, and overall support than those who were externally regulated. Thus, perceptions of support were related to how deeply these girls internalized their identity as gymnasts.

As we reviewed earlier, the level of internalization of behaviors is also exquisitely tied to well-being. Accordingly, SDT suggests that the degree to which identities conduce toward self-realization or eudaimonia (Waterman, 1993) is a function of whether the identity formation is in line with psychological needs. That is, regardless of whether identities are conferred or actively selected, they must be authentically held and must allow needs to be actively fulfilled in order to truly contribute to well-being. Recent research has indeed shown that greater authenticity in adolescents' identities is indicated in relationships with greater support for autonomy, competence, and relatedness needs and is associated with fuller experiences of the self, greater openness to expression, and greater vitality within close relationships (La Guardia, 2001). Also, goal attainments that are self-concordant with one's identity (those in line with psychological needs) have been shown to conduce to greater well-being than nonconcordant goal attainments (Sheldon & Elliot, 1998), and goal progress on self-concordant goals has been shown to yield greater well-being benefits than progress on nonconcordant goals (Sheldon & Kasser, 1998).

Research has also shown how the lack of support for basic psychological needs can engender insecurity in adolescents and catalyze alternative val-

ues, goals, lifestyles, and compensatory activities that conduce to lower well-being. Ryan and Kuczkowski (1994) examined the effects of teenagers' felt security with parents on their development of autonomy and individuation. They showed that in earlier adolescence, self-consciousness, tendencies toward peer conformity, and fears of standing out or being different are normatively quite high, but that these waned as teenagers gained more sense of themselves, their values, and their identity. Importantly, however, older adolescents who experienced emotional insecurity with their parents remained more preoccupied with internal self-controls and appeared to be more susceptible to conformity and self-consciousness than those who felt secure with their parents.

Furthermore, Kasser, Ryan, Zax, and Sameroff (1995) surveyed late adolescents about their orientations toward intrinsic (e.g., value focused on relationships, community, personal growth) versus extrinsic (e.g., materialism, financial success) goals, and their maternal and social environments in which they grew up. They found that teens who valued extrinsic goals had mothers who, by both teen and mother self-report, were less supportive of autonomy and relatedness than those who were more focused on intrinsic goals. Kasser and colleagues suggested that failure of parents to support basic needs leads teens to feel greater insecurity, and as such adopt excessive materialistic values to bolster their own sense of self-worth. Similarly, Williams, Cox, Hedberg, and Deci (2000) showed that parents who were more controlling versus autonomy supportive had teens who were more focused on extrinsic goals, such as materialism and image, and who were more likely to engage in high-risk behaviors, such as illicit drug use and risky sexual practices.

Together these findings suggest that parents who foster insecurity, primarily through poor autonomy and relatedness support, inhibit their teenagers' development of self-regulation and can contribute to their adolescents' conformity and image-focused identities. Importantly, these studies also suggest that the relative authenticity by which adolescents come to adopt identities, as opposed to acquiring identities as compensatory means for satisfying needs, affects how healthy and vital they are in their everyday lives.

Although this research reviewed focused mainly on the impact of parents, indeed schools and peers become centrally influential in adolescents' adoption of identities. For example, teachers' interest in and attention to their students' unique skills, talents, and interests centrally affect students' pursuit of vocations, as well as their moral and emotional development. Some research has suggested that adolescents experience a decline in the quality of their relationships with their teachers after their transition to middle or junior high school (see Midgley & Edelin, 1998). With school becoming such an influential arena in adolescent development, the loss of

relatedness in this arena becomes an even greater concern for adolescents' optimal development and well-being.

As an aside, we want to emphasize that we believe that providing a supportive backdrop for adolescents' optimal identity formation is not merely a task of families and schools but is a task of the greater global community as a whole. That is, increasingly as the task of identity formation involves teenagers internalizing and integrating a way of being that fits within society, we must pay attention to the varied societal influences that promulgate identities. As we noted earlier, the nature of modern societies is such that identities are increasingly not assigned or conferred, but instead are necessarily forged by each individual. The growth of the global economy and the expansion of the media have resulted in a proliferation of "possible selves" that adolescents can try on, much more so than any time in the past. There is a sense of what everyone else is doing and how everyone else is "being"—affording exciting new possibilities but also in turn making identity formation potentially a more daunting task.

Many of the messages in popular culture today suggest that the "good life" or "the best way to be" are defined by image, money, and hedonic pleasures. Thus, one must have the "right clothes," the "right car," the "right job," and "be attractive" in order to be somebody. Such images have a special attraction to those who are vulnerable to insecurities, as Kasser and colleagues (1995) have suggested, yet have little connection to the paths that are truly self-realizing or conducive to a healthy identity and way of being.

Again, we emphasize that some identities will be effective in yielding true need satisfactions, whereas others will be poor servants of needs. As the research we have reviewed has suggested, identities adopted as "compromise" formations represent attempts to satisfy needs through indirect, substitute, or reactive means, and conduce to lower well-being, while those that are authentically held and allow true expression of one's needs conduce to self-realization and growth. Clearly, with all of the possible potentialities, finding the identity fit that will conduce toward self-realization has seemingly become even more challenging, with optimal identity formation requiring adequate need support at a more global community level.

CONCLUSION: THE TASKS OF ADOLESCENCE REVISITED

The tasks of adolescence are formidable. Adolescents are faced with transforming familial relationships, forming extrafamilial relationships with partners and friends, meeting the demands of school and work, choosing and developing vocational and avocational interests, and internalizing and integrating a coherent set of social values. The modern societal landscape has afforded exciting new possibilities and avenues for exploration and

experimentation of "possible selves." However, with this expansion of possibilities, there is also an increased risk that adolescents can get lost, confused, or pushed down the "wrong" paths.

In this chapter we have argued that support for psychological needs for autonomy, competence, and relatedness are essential to meeting the tasks and challenges of adolescent development in a healthy way. Using the framework of self-determination theory, we illustrated how social environments that meet these psychological needs facilitate healthy development, while those social contexts that do not meet needs accordingly inhibit or derail optimal functioning and growth. Specifically, we focused on how parental relationships can provide a secure foundation from which adolescents can tackle the challenges of their passage into adulthood. We also reviewed how need fulfillment in the school context plays a crucial role in the promotion of intrinsic motivation and the internalization of values. Finally, we identified how the concept of needs informs the acquisition of identities more generally in the social context.

The development of adolescents is a systemic issue—one that requires the collaborative energies of parents, schools, communities, legislators, and government leaders to identify and attend to the needs of adolescents and work toward providing supportive and nurturant environments for their growth and development. The more parental relationships, school environments, and the greater society promote adolescents' exploration and experimentation in a context of need support, the more adolescents will be able to engage the world with energy, authentically internalize and self-regulate their behaviors, and actualize their potentials. Conversely, the more environments serve to foreclose identity formations by limiting opportunities or forcing adherence to particular values, goals, or pathways, the more adolescents will likely lead a stunted and unsatisfying existence that is experienced as alien to the self, and lacks vitality and meaning. The choice and responsibility of how we promote development is collectively ours.

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